

Appl. No. 10/081,061  
Amdt. Sent October 12, 2006  
Amendment under 37 CFR 1.116 Expedited Procedure  
Examining Group 2134

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-19. (Canceled)

1                   20.     (Currently amended) A computer system having an input/output  
2     processing unit for executing a file access, an access execution unit for requesting a file access  
3     via the input/output processing unit in response to a user instruction, and an access control unit  
4     for performing access control when the file access is executed, wherein the access control unit  
5     comprises:  
6                   a storage unit protected from the access execution unit;  
7                   a file list stored in the storage unit describing security levels of files;  
8                   a user list stored in the storage unit describing clearances of users;  
9                   an access control processing unit for determining whether the file access is legal  
10    in accordance with the file list, the user list, an access type of the file access, information  
11    identifying a file, and information identifying a user, wherein if a host OS program of the access  
12    control processing unit is tampered with, a guest OS of the access control processing unit is  
13    instructed to invalidate one or more functions of the host OS program;  
14                   an enciphering unit for encrypting a file when storing the file on a storage  
15    medium;  
16                   a deciphering unit for decrypting the encrypted file when retrieving the encrypted  
17    file from the storage medium; wherein the storage unit stores at least one cipher key commonly  
18    used among a plurality of security levels for each file at least one key created independently of  
19    ~~the user, which the encipher~~ key is used for both encrypting and decrypting; and  
20                   an access monitor unit which:

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21                   when the input/output processing unit executes a file access, sends the  
22           access type, the information identifying the file, and the information identifying the user  
23           to the access control processing unit;  
24                   receives a validity determination result of the file access from the access  
25           control processing unit; and  
26                   if the file access is legal, causes the input/output processing unit to execute  
27           the file access, and if the file access is illegal, inhibits the file access.

1                   21.   (Previously presented) A system as in claim 20 further comprising an  
2           exclusive control unit for protecting, from the access execution unit, a storage area of the storage  
3           unit to be used by the access control processing unit.

1                   22.   (Previously presented) A system as in claim 21 further comprising a user  
2           list setting/managing unit for setting and managing the user list.

1                   23.   (Previously presented) A system as in claim 22 wherein the user list  
2           setting/managing unit includes an authentication unit for authenticating a security administrator.

1                   24.   (Previously presented) A system as in claim 23 wherein the security  
2           administrator is different from a system administrator who manages the access execution unit.

1                   25.   (Previously presented) A system as in claim 20 further comprising a file  
2           list setting/managing unit for setting and managing the file list.

1                   26.   (Previously presented) A system as in claim 25 wherein the file list  
2           setting/managing unit includes an authentication unit for authenticating a security administrator.

1                   27.   (Previously presented) A system as in claim 26 wherein the security  
2           administrator is different from a system administrator who manages the access execution unit.

1                   28.   (Previously presented) A system as in claim 20 further comprising:

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2 an enciphering unit for encrypting a file if the file access requesting to output a  
3 file to the storage unit is legal; and

4 a deciphering unit for decrypting the enciphered file if the file access for  
5 requesting to input the enciphered file from the storage unit is legal.

1 29. (Previously presented) A system as in claim 28 wherein an exclusive  
2 control unit protects from the access execution unit a storage area in the storage unit storing at  
3 least one key information set to be used by the enciphering unit and the deciphering unit.

1 30. (Previously presented) A system as in claim 20 wherein the enciphering  
2 unit and the deciphering unit use a plurality set of different key information and at least one  
3 cipher method for each security level written in the file list.

1 31. (Previously presented) A system as in claim 20 further comprising an  
2 input/output monitor unit for monitoring that the input/output processing unit or the access  
3 monitor unit is not tampered or performs a predetermined operation, and instructing to inhibit an  
4 input/output of a file if the input/output processing unit or the access monitor unit is tampered or  
5 performs an operation different from the predetermined operation.

1 32. (Previously presented) A system as in claim 20 further comprising a file  
2 access log processing unit for storing and managing information on each file access sent to the  
3 access control processing unit.

1 33. (Previously presented) A system as in claim 20 wherein the access control  
2 unit is realized by a software module.

1 34. (Previously presented) A system as in claim 20 wherein the access control  
2 unit is realized by a hardware module.

1 35. (Previously presented) A system as in claim 20 wherein the key  
2 comprises a symmetric key.